

44. ENERGY AND THE CONSTITUTION #1

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Former Senator Schmitt Advocates a National Energy Plan as Constitutionally Mandated

The constitutional mandate for a rational, scientific, and economically sound national energy plan lies in its close modern relationship to the constitutionally mandated “common defence”. Dependence on foreign sources of oil, and therefore transportation fuels, limits both near and long-term national security options. That dependence also creates an economic burden to our economy that restricts the liberty of Americans and their 9th Amendment guarantee of the pursuit of happiness.

Dependence on imported oil removes the defensive and foreign policy leverage needed to prevent attacks by terrorist states. Imports subsidize the financial supporters of terrorism. Dependence has the further effect of giving the United States no influence over the price it pays for oil. If the price of oil came under the direct economic influence of the United States, for example, Iran would have great difficulty affording the development of nuclear weapons and their delivery systems.

Dependence on oil and gasoline imports also gives China further means to intimidate our national leaders into acquiescence to its continuing ambition for international dominance. China’s rapidly growing economy has a major influence on world energy

supply and cost, competing directly with our needs. Cold War II has begun; however, it is being fought on an economic and energy front as well as on a military deterrence front. On this point, China’s rapidly developing space capabilities and its expressed interest in lunar helium-3 energy resources cannot be ignored.

Many varied elements are necessary to a long-range plan that would ultimately provide for energy independence and a more stable economy. A scientifically and economically based, long-range plan also would provide far more benefit to the preservation of the environment and natural resources than possible today.

In the near term, Congress must take back the control of regulatory laws it has transferred to the Executive Branch, particularly those rules that prevent attaining energy independence from commercially viable natural energy resources. Closely tied to independence are the facilities necessary to refine domestic crude oil into gasoline, diesel, and jet fuel. The One House Legislative Veto described previously in these essays [see No. 38-endnote, 42-endnote] constitutes a constitutional means for the Congress to control rule making delegated to the Executive.

President Obama's continuing statements and restrictive actions notwithstanding, the only commercially viable natural resource that currently offers an unsubsidized path to independence from imported oil is domestically accessible crude oil along with the domestic refineries necessary to create fuel oil, diesel, gasoline, and jet fuel. Natural gas offers some potential to reduce imports; however, the use of tax credits or direct subsidies of the initial capital costs for fleet conversions to natural gas, or even automobile conversions, should come with payback provisions as those conversions realize long-term economies.

To fully understand the potential and challenges of gaining near-term energy independence, industry, national, and state policy makers require a more complete understanding of the potential resources of oil and natural gas available beneath public lands and in off-shore areas. A rapid, cooperative industry-federal-state scientific assessment of those potential resources would provide the knowledge necessary to evaluate the private investments and national enabling policies necessary to achieve and maintain independence.

Research and technology development aimed at future commercially viable alternative portable fuels should focus on the following: coal liquids, ethanol from nonfood crops, and algal bio-diesel, and water-derived hydrogen from catalytic systems energized by the sun or by waste heat from needed power plants. Significant historical and current technological progress has been made with regard to these fuels; however, commercial viability must include production costs low enough to enable the creation of convenient and cost-effective fuel delivery infrastructures. Battery-based systems do not constitute a viable, broadly applicable alternative portable drive system due to their

very low, coal- or uranium-to-power-train total efficiency, as well as their charging inconvenience.

Major solar energy systems such as a large scale wind and solar electric plants are far from being competitive without major subsidies from taxpayers or ratepayers. For these systems to have any hope of being practical contributors to the national energy mix, a significant technology development effort must be undertaken by industry. Due to the great competitive gulf between these systems and standard coal and nuclear systems, it is questionable if the federal government should be funding a new round of technology development. Many more critical energy initiatives require urgent attention.

Other essays in this series [[see Nos. 10, 29, 30, 31, 32, 33, 34, and 37](#)] have made the scientific case that climate change largely results from natural phenomenon and that attempts to reduce the very small human induced component to such change will have little practical effect. At the same time, misguided political efforts to control climate change unconstitutionally restrict the liberties of Americans. On the other hand, even if not persuaded by the scientific evidence *against* human-caused climate change, the replacement of end-of-life coal-fired power plants with advanced nuclear plants constitutes the best of all economic and environmental worlds. The first step in such replacement should be the reform and streamlining of regulations governing nuclear plant construction. If that is done, and the time necessary to construct plants is halved, investment capital will follow the demand without any need for loan guarantees or subsidies.

At the same time as America should be moving toward nuclear power as the source of most of its electricity, the effort to find underground repositories for the burial of

spent nuclear fuel rods should be abandoned. Monitored, retrievable, above ground storage makes much more sense in the long-term. Future reprocessing of these rods will provide additional fuel for electrical power generation as well as numerous useful isotopes for medical and industrial applications. The actual useless waste, that is, the much reduced, left over high-level radioisotopes, ultimately can be changed (transmuted) into stable isotopes or easily confined short-lived radioisotopes.

Reprocessing of nuclear fuel rods and transmutation of the remaining high-level radioactive waste will require significant new investment by industry if allowed by federal authorities. Although defense-related spent fuel rods are currently reprocessed and France reprocesses their civil reactor fuels, commercial reprocessing development in the United States was terminated by the Carter Administration. It should be restarted, immediately. Transmutation of actual waste from reprocessing can be done most efficiently by exposure of radioisotopes to energetic protons produced by helium-3 fusion systems. Until reprocessing and transmutation technologies have been developed to a commercial level of readiness, above ground, spent fuel rod storage is the most practical solution to this contentious issue.

In the longer term, the development of modular nuclear breeder systems, high temperature gas reactors, thorium-fueled reactors, and lunar helium-3 fusion should be part of the mix of systems examined by robust research and technology development programs. Government, industry, and academia should be mobilized into joint technology development efforts not unlike those that made American aeronautics the envy of the world in the 20th Century. Unfortunately, inherent scientific, engineering, capital

cost, and waste disposal issues mean that the billions spent on pursuing tritium-fueled fusion will not succeed in developing a commercially viable fusion power system.

A central underlying issue in the implementation of a defense-oriented national energy plan continues to be the lack of both objectivity and quality in the American educational system [see [essay Nos. 13, 14, 15 and 25](#)]. From beginning to end, most young people now miss both the essential foundations of history, constitutional government, and science and mathematics necessary to participate in the implementation of such a plan. No energy plan, much less our national defense can be successful unless the States begin to fully live up to their 10th Amendment responsibilities in education. As during the height of World War II and the Cold War, the Federal Government only should be a non-controlling partner in the funding of those elements of science and engineering education essential to the “common Defence” but no more than this if liberty is to be preserved.

Previous Congresses and Administrations have not upheld their constitutional mandate to “provide for the Common defence” relative to energy and instead have used politically motivated legislation and regulation to prevent the private sector from providing for the nation’s critical energy needs. This neglect has led to a national security crisis through progressively increased dependence on foreign sources of oil as well as other strategic resources. The Constitution requires that there be a concerted and immediate federal focus on energy independence. This is not what the Founders would have desired, but past neglect means no choice remains other than capitulation to the economic and military intimidation of the enemies of liberty.

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